

The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

1. (Currently Amended) ~~Nucleic~~ An isolated nucleic acid molecule, selected from the group consisting of:
  - a) a nucleic acid molecule ~~molecules~~ encoding the a polypeptide disclosed by having the amino acid sequence of SEQ ID NO: 2;
  - b) a nucleic acid molecule ~~molecules~~ containing comprising the sequence of ~~depicted by~~ SEQ ID NO: 1;
  - c) a nucleic acid molecule ~~molecules~~ which encodes a fluorescent protein and whose complementary strand hybridizes under stringent conditions with a nucleic acid molecule encoding the amino acid sequence of SEQ ID NO:2 of a) or b) and or with a nucleic acid molecule consisting of the nucleic acid sequence of SEQ ID NO:1, ~~which have the biological function of a fluorescent protein; and~~
  - d) ~~nucleic acid molecules which differs from those mentioned under c) due to the degeneracy of the genetic code;~~
  - ed) a nucleic acid molecule ~~molecules~~ ~~whose comprising a sequence which is~~ sequences are at least 95% homologous to SEQ ID NO: 1 and which have ~~encodes the biological function of a fluorescent protein; and~~
  - f) ~~nucleic acid molecules whose sequences are at least 65% homologous to SEQ ID NO: 1 and which have the biological function of a fluorescent protein.~~
2. (Currently Amended) The isolated nucleic acid molecule ~~molecules~~ according to Claim 1, wherein said nucleic acid molecule further comprises ~~whose sequence contains a functional promoter operably linked to its 5' end of the sequence.~~
3. (Currently Amended) A recombinant vector comprising the isolated nucleic acid molecule of claim 1 or claim 2 ~~molecules according to Claim 3, which are a part of a recombinant DNA or of RNA vectors.~~
4. (Currently Amended) A host cell ~~Organisms, which contains the contain a the~~ vector described according to Claim 3.
5. (Cancel) ~~Oligonucleotides, having more than 10 contiguous nucleotides which are identical or complementary to DNA or RNA sequences according to Claim 1.~~
6. (Currently Amended) Peptides, An isolated protein ~~which are encoded by the nucleotide~~

~~sequence of according to nucleic acid molecule of claim 1.~~

7. (Currently Amended) A method Methods of producing a fluorescent protein encoded by the nucleic acid of claim 1 the CGFP polypeptide according to Claim 6 in a host cell, wherein said host cell is a bacteria cell, or a eukaryotic cells or in in-vitro expression systems. comprising the steps of:
  - (i) transforming said host cell with the expression vector of claim 11, and
  - (ii) growing said host cell from step (i) under conditions that permit said fluorescent polypeptide to be produced in the transformed host cell of part (i).
8. (Currently Amended) The method of claim 7, further comprising Methods of purifying/isolating a the fluorescent CGFP polypeptide according to claim 6.
9. (Currently Amended) ~~Peptides having more than 5 contiguous amino acids which are recognized immunologically by antibodies~~ An isolated antibody which specifically binds to the fluorescent protein of claim 6.
10. (Currently Amended) A method of determining whether a gene of interest, or fragment thereof, has been expressed comprising monitoring the fluorescence of a polypeptide encoded by a fusion gene and comparing it to the fluorescence when the gene or fragment is not expressed, wherein said fusion gene comprises the nucleic acid of claim 1 operably linked to said gene of interest, or fragment thereof Use of the fluorescent protein CGFP according to claims 1 to 7 as a marker gene and reporter gene.
11. (New) The recombinant vector of claim 3, wherein the vector is an expression vector.
12. (New) The vector of claim 11, wherein said vector comprises an inducible promoter.